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Gregory A. Nelson, Esq.  
Akerman, Senterfit & Edison, P.A.  
222 Lakeview Avenue, Suite 400  
P.O. Box 3188  
West Palm Beach, FL 33402-3188

EXAMINER

MARCHESCHI, MICHAEL A

ART UNIT

PAPER NUMBER

1755

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/081,979

Applicant(s)

SINGH ET AL.

Examiner

Michael A March schi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 38-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner, *f. Draftsperson*  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☒ Interview Summary (PTO-413) Paper No(s). 3.
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

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Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-37, drawn to a polishing composition, classified in class 51, subclass 298.
- II. Claims 38-43, drawn to a polishing method, classified in class 438, subclass 692.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process for using the product as claimed can be practiced with another materially different product, such as, one that contains hard particles in an amount more than 1%.

Because these inventions are distinct for the reasons given above and (1) have acquired a separate status in the art as shown by their different classification, (2) have acquired a separate status in the art because of their recognized divergent subject matter, and (3) the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Neil R. Jetter on 6/19/03 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-37. Affirmation of this election must be made by applicant in replying to this Office action. Claims 38-43 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claims 1-6 and 8-37 are indefinite because no **specific** composition for the material is set forth. "An article characterized by physical properties alone and no specific composition is vague and indefinite. See *Ex parte Slob*, 157 USPQ 172. Although some of the claims define additional materials, the claims in question **do not** set forth what the reagent of the solution is and only define the reagent in terms of its function (formation of soft layer).

Claims 1-36 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 33 are indefinite as to the phrase "adapted to" because the examiner is unclear as to how it is adapted, thus rendering the scope of the claims unclear.

Claim 26 is indefinite because the use of a trademark or tradename in a claim was held to be indefinite. (*Ex parte Davis* 80 USPQ 448 (PO BdPatApp 1949); *Ex parte Kattwinke*; 12 USPQ 11 PO BdPatApp 1931).

Claim 36 is indefinite as to the phrase "low K dielectric" because the term "low" is a relative term which renders the claim indefinite. This term is not defined by the claim, the

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specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The other claims are indefinite because they depend on indefinite claims.

The disclosure is objected to because of the following informalities:

The specification is objected to because it does **not** define in the section entitled "BRIEF DESCRIPTION OF THE DRAWINGS" what figures 1(a), 1(b), 1(c), 1(d), 1(e) show. Although the specification on page 19 makes a general description of figure 1, this is not sufficient because all of the figures must be defined (i.e. 1(a)-1(e)). The examiner acknowledges that page 5, line 12-page 6, line 9 defines what fig 1(a)-(e) define but this description must be in the section entitled "BRIEF DESCRIPTION OF THE DRAWINGS".

Appropriate correction is required.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

On page 21, applicants refer to figures 13(a), 13(b) and 13(c) but the figures are not labeled (a), (b) and (c) in the physical drawings. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**For the purpose of the following rejections, the examiner is interpreting the instant claims to be claiming a slurry comprising a solution of iodine, fluorine, bromine HI, potassium iodate, sulfuric acid, hydrochloric acid or carbonic acid (i.e. carboxylic acid), as well as, additional components specifically defined in the dependent claims. The other limitations (i.e. soft layer, etc.) are not seen to provide any patentable subject matter to the claims since these limitations are the intended function of the solution.**

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Claims 1-3, 7-16, 19-23 and 30-37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sasaki et al.

Sasaki et al. teach in column 3, line 37-column 4, line 10 and column 8, lines 30-40, a polishing composition comprising water, a chemical agent (i.e. benzotriazole) and a sulfuric or hydrochloric acid solution. Ammonium chloride can also be used in the composition.

The claimed invention is anticipated by the reference because said reference teaches a composition which comprises all of the components defined by the rejected claims. Although the reference does not literally define the function of the solution, no patentable distinction is seen to exist because the solution is the same and therefore the function is inherent in the composition because the same solution inherently yields the same function. Although the reference does not literally define the thickness and types of soft layer (claims 2, 3, 12 and 30-32), these limitations are the intended function of the solution and it is the examiners position that the intended function of the solution provides no patentable weight to the solution itself. With respect to the selectivity (claims 19-23 and 36-37), it is the examiners position that since the composition is the same (composition comprising the same solution), the selectivity characteristics are inherent because the same composition is expected to yield the same results. With respect to the pH value of claim 8, the claimed pH value is extremely broad (i.e. encompasses all pH values) and it is the examiners position that the pH of the reference composition (although not literally defined) inherently falls within the claimed broad range because all composition must have a pH. Finally, with respect to the etchant of claims 9-11, the claims define that the **same** acid, as used in the solution, can be used as the etchant, thus the reference teaches this limitation.

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In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary. In addition, since the composition is the same (same components present), it is the examiners position that the function of the composition is expected and therefore obvious because the same composition is expected to function in the same manner in the absence of any evidence showing the contrary.

Claims 1-3, 7-17, 19-25 and 27-37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kondo et al.

Kondo et al. teach in column 6, line 5-column 9, line 14 and claims 2, 8 and 11-17, a polishing composition comprising a solution which comprises potassium iodate, an inorganic or organic acid, ammonium chloride, benzotriazole and a polymer additive (surfactant).

The claimed invention is anticipated by the reference because said reference teaches a composition which comprises all of the components defined by the rejected claims. Although the reference does not literally define the function of the solution, no patentable distinction is seen to exist because the solution is the same and therefore the function is inherent in the composition because the same solution inherently yields the same function. Although the reference does not literally define the thickness and types of soft layer (claims 2, 3, 12 and 30-32), these limitations are the intended function of the solution and it is the examiners position that the intended function of the solution provides no patentable weight to the solution itself. With respect to the selectivity (claims 19-23 and 36-37), it is the examiners position that since the composition is the same (composition comprising the same solution), the selectivity characteristics are inherent because the same composition is expected to yield the same results.



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With respect to the pH value of claim 8, the claimed pH value is extremely broad (i.e. encompasses all pH values) and it is the examiners position that the pH of the reference composition (although not literally defined) inherently falls within the claimed broad range because all composition must have a pH. With respect to the etchant of claims 9-11, the reference teaches that the claimed acids can be used. Finally, with respect to the use of a chelating agent (claim 17), the reference states that citric acid can be used and this is a chelating agent.

In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary. In addition, since the composition is the same (same components present), it is the examiners position that the function of the composition is expected and therefore obvious because the same composition is expected to function in the same manner in the absence of any evidence showing the contrary.

Claims 1-12, 19-23, 27 and 30-37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ichinose et al.

Ichinose et al. teach in column 3, line 35-column 4, line 45, a polishing composition comprising a sulfuric or hydrochloric acid solution and resin particles (polystyrene).

The claimed invention is anticipated by the reference because said reference teaches a composition which comprises all of the components defined by the rejected claims. Although the reference does not literally define the function of the solution, no patentable distinction is seen to exist because the solution is the same and therefore the function is inherent in the composition because the same solution inherently yields the same function. Although the

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reference does not literally define the thickness and types of soft layer (claims 2, 3; 12 and 30-32), these limitations are the intended function of the solution and it is the examiners position that the intended function of the solution provides no patentable weight to the solution itself.

With respect to the selectivity (claims 19-23 and 36-37), it is the examiners position that since the composition is the same (composition comprising the same solution), the selectivity characteristics are inherent because the same composition is expected to yield the same results.

With respect to the pH value of claim 8, the claimed pH value is extremely broad (i.e. encompasses all pH values) and it is the examiners position that the pH of the reference composition (although not literally defined) inherently falls within the claimed broad range because all composition must have a pH. With respect to the etchant of claims 9-11, the claims define that the **same** acid, as used in the solution, can be used as the etchant, thus the reference teaches this limitation. Finally, with respect to the use of a polymer additive (claim 27), this reads on the use of resin particles since they are polymers additives.

In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary. In addition, since the composition is the same (same components present), it is the examiners position that the function of the composition is expected and therefore obvious because the same composition is expected to function in the same manner in the absence of any evidence showing the contrary.

Claims 1-3, 7-23, 27 and 29-37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 00/24842.

The WO reference teaches on page 6, lines 10-15 and claims 15-20, a slurry composition comprising a solution which comprises potassium iodate, an organic acid, a fluoride salt, benzotriazole, EDTA and other additives (can be polymers).

The claimed invention is anticipated by the reference because said reference teaches a composition which comprises all of the components defined by the rejected claims. Although the reference does not literally define the function of the solution, no patentable distinction is seen to exist because the solution is the same and therefore the function is inherent in the composition because the same solution inherently yields the same function. Although the reference does not literally define the thickness and types of soft layer (claims 2, 3, 12 and 30-32), these limitations are the intended function of the solution and it is the examiners position that the intended function of the solution provides no patentable weight to the solution itself. With respect to the selectivity (claims 19-23 and 36-37), it is the examiners position that since the composition is the same (composition comprising the same solution), the selectivity characteristics are inherent because the same composition is expected to yield the same results. With respect to the pH value of claim 8, the claimed pH value is extremely broad (i.e. encompasses all pH values) and it is the examiners position that the pH of the reference composition (although not literally defined) inherently falls within the claimed broad range because all composition must have a pH. With respect to the etchant of claims 9-11, the reference teaches that the claimed acids can be used.

In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary. In addition, since the composition is the same (same components present), it is the examiners position that the function

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of the composition is expected and therefore obvious because the same composition is expected to function in the same manner in the absence of any evidence showing the contrary.

Claims 1-14, 17-27, and 29-37 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Zhang et al.

Zhang et al. teach in table A, a polishing composition comprising a solution which comprises an oxidizer, organic acids, inorganic acid, EDTA, a surfactant, benzotriazole, and polymer particles (polystyrene).

The claimed invention is anticipated by the reference because said reference teaches a composition which comprises all of the components defined by the rejected claims. Although the reference does not literally define the function of the solution, no patentable distinction is seen to exist because the solution is the same and therefore the function is inherent in the composition because the same solution inherently yields the same function. Although the reference does not literally define the thickness and types of soft layer (claims 2, 3, 12 and 30-32), these limitations are the intended function of the solution and it is the examiners position that the intended function of the solution provides no patentable weight to the solution itself. With respect to the selectivity (claims 19-23 and 36-37), it is the examiners position that since the composition is the same (composition comprising the same solution), the selectivity characteristics are inherent because the same composition is expected to yield the same results. With respect to the pH value of claim 8, the claimed pH value is extremely broad (i.e. encompasses all pH values) and it is the examiners position that the pH of the reference composition (although not literally defined) inherently falls within the claimed broad range

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because all composition must have a pH. With respect to the etchant of claims 9-11, the reference teaches that the claimed acids can be used. Finally, with respect to the use of a polymer additive (claim 27), this reads on the use of resin particles since they are polymers additives and/or the reference teaches that polymer materials can be added.

In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary. In addition, since the composition is the same (same components present), it is the examiners position that the function of the composition is expected and therefore obvious because the same composition is expected to function in the same manner in the absence of any evidence showing the contrary.

Claims 1-14, 17-27, and 29-37 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Takashima et al.

Takashima et al. teach in sections [0055]-[0060], a polishing composition comprising a solution which comprises an oxidizer (iodate), sulfuric acid, a surfactant, benzotriazole, and polymer particles (polystyrene).

The claimed invention is anticipated by the reference because said reference teaches a composition which comprises all of the components defined by the rejected claims. Although the reference does not literally define the function of the solution, no patentable distinction is seen to exist because the solution is the same and therefore the function is inherent in the composition because the same solution inherently yields the same function. Although the reference does not literally define the thickness and types of soft layer (claims 2, 3, 12 and 30-32), these limitations are the intended function of the solution and it is the examiners position

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that the intended function of the solution provides no patentable weight to the solution itself.

With respect to the selectivity (claims 19-23 and 36-37), it is the examiners position that since the composition is the same (composition comprising the same solution), the selectivity characteristics are inherent because the same composition is expected to yield the same results.

With respect to the etchant of claims 9-11, the reference teaches that the claimed acids can be used. Finally, with respect to the use of a polymer additive (claim 27), this reads on the use of resin particles since they are polymers additives.

In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary. In addition, since the composition is the same (same components present), it is the examiners position that the function of the composition is expected and therefore obvious because the same composition is expected to function in the same manner in the absence of any evidence showing the contrary.

Claims 1-3, 7-25, and 30-37 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hardy et al.

Hardy et al. teach in table A, a polishing composition comprising a solution which comprises an oxidizer, benzotriazole, a chelating agent, an EDTA compound, a surfactant, sulfuric acid, nitric acid, ammonium chloride and a viscosity modifier.

The claimed invention is anticipated by the reference because said reference teaches a composition which comprises all of the components defined by the rejected claims. Although the reference does not literally define the function of the solution, no patentable distinction is seen to exist because the solution is the same and therefore the function is inherent in the

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composition because the same solution inherently yields the same function. Although the reference does not literally define the thickness and types of soft layer (claims 2, 3, 12 and 30-32), these limitations are the intended function of the solution and it is the examiners position that the intended function of the solution provides no patentable weight to the solution itself. With respect to the selectivity (claims 19-23 and 36-37), it is the examiners position that since the composition is the same (composition comprising the same solution), the selectivity characteristics are inherent because the same composition is expected to yield the same results. With respect to the pH value of claim 8, the claimed pH value is extremely broad (i.e. encompasses all pH values) and it is the examiners position that the pH of the reference composition (although not literally defined) inherently falls within the claimed broad range because all composition must have a pH. With respect to the etchant of claims 9-11, the reference teaches that the claimed acids can be used.

In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary. In addition, since the composition is the same (same components present), it is the examiners position that the function of the composition is expected and therefore obvious because the same composition is expected to function in the same manner in the absence of any evidence showing the contrary.

Claims 26-28 are rejected under 35 U.S.C. 103(a) as obvious over Hardy et al.

Hardy et al. teach that surfactants can be used and this makes obvious the claimed ones. The reference also states that viscosity modifiers can be used and since viscosity modifiers are polymers, this makes the limitation of claim 27 obvious. The specific polymers defined in claim

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28 are encompassed by the disclosure of viscosity modifiers because the materials fall within this category in the absence of any evidence showing the contrary.

Claims 1-12, 15, 17, 19-25, 27 and 30-37 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yano et al.

Yano et al. teach in column 10, line 57-column 15, line 50, a polishing composition comprising a solution which comprises potassium iodate, polymer particles (polystyrene), organic acids, a surfactant, sulfuric acid and a salt.

The claimed invention is anticipated by the reference because said reference teaches a composition which comprises all of the components defined by the rejected claims. Although the reference does not literally define the function of the solution, no patentable distinction is seen to exist because the solution is the same and therefore the function is inherent in the composition because the same solution inherently yields the same function. Although the reference does not literally define the thickness and types of soft layer (claims 2, 3, 12 and 30-32), these limitations are the intended function of the solution and it is the examiners position that the intended function of the solution provides no patentable weight to the solution itself. With respect to the selectivity (claims 19-23 and 36-37), it is the examiners position that since the composition is the same (composition comprising the same solution), the selectivity characteristics are inherent because the same composition is expected to yield the same results. With respect to the pH value of claim 8, the claimed pH value is extremely broad (i.e. encompasses all pH values) and it is the examiners position that the pH of the reference composition (although not literally defined) inherently falls within the claimed broad range



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because all composition must have a pH. With respect to the etchant of claims 9-11, the reference teaches that the claimed acids can be used. Finally, with respect to the use of a polymer additive (claim 27), this reads on polymer particles.

In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary. In addition, since the composition is the same (same components present), it is the examiners position that the function of the composition is expected and therefore obvious because the same composition is expected to function in the same manner in the absence of any evidence showing the contrary.

Claim 26 is rejected under 35 U.S.C. 103(a) as obvious over Yano et al.

Yano et al. teach that surfactants can be used and this makes obvious the claimed ones.

Claims 1-3, 7-9, 19-23 and 30-37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wu et al.

Wu et al. teach in claim 4, a polishing composition comprising a solution which comprises potassium iodate.

The claimed invention is anticipated by the reference because said reference teaches a composition which comprises all of the components defined by the rejected claims. Although the reference does not literally define the function of the solution, no patentable distinction is seen to exist because the solution is the same and therefore the function is inherent in the composition because the same solution inherently yields the same function. Although the reference does not literally define the thickness and types of soft layer (claims 2, 3 and 30-32),

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these limitations are the intended function of the solution and it is the examiners position that the intended function of the solution provides no patentable weight to the solution itself. With respect to the selectivity (claims 19-23 and 36-37), it is the examiners position that since the composition is the same (composition comprising the same solution), the selectivity characteristics are inherent because the same composition is expected to yield the same results. With respect to the pH value of claim 8, the claimed pH value is extremely broad (i.e. encompasses all pH values) and it is the examiners position that the pH of the reference composition (although not literally defined) inherently falls within the claimed broad range because all composition must have a pH.

In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary. In addition, since the composition is the same (same components present), it is the examiners position that the function of the composition is expected and therefore obvious because the same composition is expected to function in the same manner in the absence of any evidence showing the contrary.

Claims 1-12, 15, 17, 19-23, 27 and 30-37 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nishimoto et al.

Nishimoto et al. teach in column 2, lines 56-57 and column 5, lines 6-55, a polishing composition comprising a solution which comprises polymer particles (polystyrene), hydrochloric acid, sulfuric acid, organic acids (citric, etc.), a salt and a polymer additive.

The claimed invention is anticipated by the reference because said reference teaches a composition which comprises all of the components defined by the rejected claims. Although

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the reference does not literally define the function of the solution, no patentable distinction is seen to exist because the solution is the same and therefore the function is inherent in the composition because the same solution inherently yields the same function. Although the reference does not literally define the thickness and types of soft layer (claims 2, 3, 12 and 30-32), these limitations are the intended function of the solution and it is the examiners position that the intended function of the solution provides no patentable weight to the solution itself. With respect to the selectivity (claims 19-23 and 36-37), it is the examiners position that since the composition is the same (composition comprising the same solution), the selectivity characteristics are inherent because the same composition is expected to yield the same results. With respect to the pH value of claim 8, the claimed pH value is extremely broad (i.e. encompasses all pH values) and it is the examiners position that the pH of the reference composition (although not literally defined) inherently falls within the claimed broad range because all composition must have a pH.

In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention in the absence of any evidence showing the contrary. In addition, since the composition is the same (same components present), it is the examiners position that the function of the composition is expected and therefore obvious because the same composition is expected to function in the same manner in the absence of any evidence showing the contrary.

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

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**"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968)". In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.**

**"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".**

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

The references cited on the 1449 have been reviewed by the examiner and are considered to be art of interest since they are cumulative to or less than the art relied upon in the above rejections.

Any foreign language documents submitted by applicant has been considered to the extent of the short explanation of significance, English abstract or English equivalent, if appropriate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Marcheschi whose telephone number is (703) 308-3815.

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The examiner can be normally be reached on Monday through Thursday between the hours of 8:30-6:00 and every other Friday between the hours of 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Mark L. Bell, can be reached at (703) 308-3823.

Amendments can also be sent by fax to the numbers set forth below:

For after final amendments, the fax number is (703) 872-9311;

For non-final amendments, the fax number is 703 872-9310.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Michael Marcheschi

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PRIMARY EXAMINER

7/05